

**GUARDIAN**

**SOLID STREAMERS**



Ahead of the Curve<sup>SM</sup>

# GUARDIAN Solid Streamers

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The GUARDIAN solid streamer is compatible with both Syntrak telemetry schemes (Fiber Optic/Twin Axial) and MSX. It has emerged as the best solution to increase the productivity of seismic operations while ensuring optimal efficiency and high-quality data.

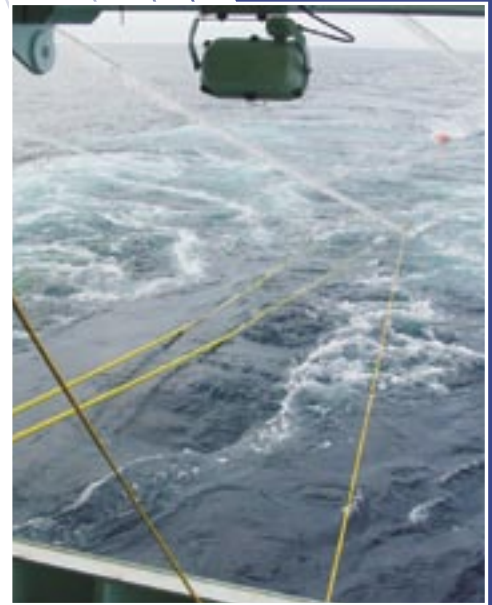
Sercel's GUARDIAN streamer is designed to assure reliable and consistent operations through the use of state-of-the-art technology. The application of GUARDIAN will provide the following benefits to your operation:

- A wider weather window increases operating time in marginal conditions and bolsters productivity.
- A robust solid streamer design and construction, combined with on-board repair capabilities reduces downtime and on-board spares.
- The inherent solid streamer design allows operations in environmentally sensitive areas and improves operational safety.
- The small diameter reduces volume and weight on board vessels.
- A consistent and constant buoyancy provides rapid mobilization and predictable geophysical performance.

# SPECIFICATIONS

## SECTION

System Compatibility	SYNTRAK® Twinax MSX™ SYNTRAK® Optic
Seismic Group Interval	12.5 m or 25.0 m Fixed Group Length or Programmable
Sensors per Group	Customized to specifications
Sensor Type	TS014 TS020
Section Diameter	57.5 mm (2.25 in.)
Section Length	100/150 m
Streamer Length	Up to 12,000 m
Breaking Tension	100 kN typical (22,480 lb.)
Communication Coil	FSK and/or PRO2000
Flotation Material	Polyurethane Matrix
Skin Material	PU/PVC Alloy



## HYDROPHONES

TS014 (MSX system)

TS020 (Syntrak systems)

## ACOUSTIC

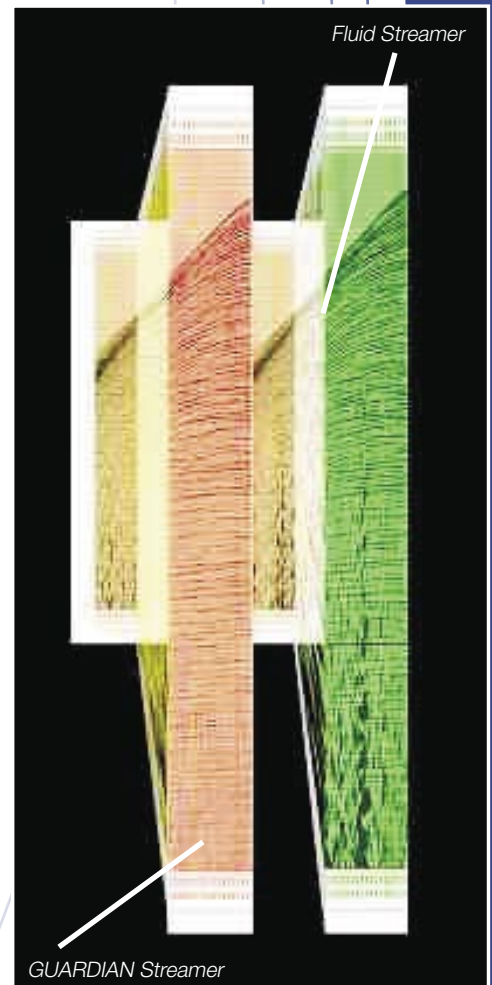
Type	PZT ceramic, acceleration canceling	PZT ceramic, acceleration canceling
Charge Sensitivity	-171.0 dB re 1nC/μPa	-169.4 dB re 1nC/μPa
Voltage Sensitivity	-196.8 dB re 1V/μPa (14.4 V/bar)	-194.0 dB re 1V/μPa (20 V/bar)

## ELECTRICAL

Capacitance	19.5nF @ 22°C ± 1nF	15.7nF @ 22°C ± 1nF
Temperature Co-efficient	+0.1 nF per °C	+0.1 nF per °C
Dissipation Factor	Less than 1.5%	Less than 1.5%
Aging Characteristic	Less than 0.5 nF loss of capacitance from 30 days to 10 years	Less than 0.5 nF loss of capacitance from 30 days to 10 years

## ENVIRONMENTAL

Environmental Sealing	Permanently sealed and compatible with seawater	Permanently sealed and compatible with seawater
Operating Depth (typical)	5 to 15 m	5 to 15 m
Survival Depth	250 m	250 m



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